material has pendant terminal carboxylic acid or amine groups and may be polyacrylic acid. (See claims 1 and 6, column 5, lines 44-52 and column 6, lines 3-5. Kamel also specifically discloses that "other methods of grafting, such as electronic or ultraviolet (UV) radiation are not suitable where it is desired (as it is here) to modify only the surface of the polymer material." (Column 6, lines 5-8). Kamel further discloses that a ***second*** biocompatible material (a polysaccharide, not acrylic acid) may be covalently crosslinked to the first biocompatible material using a coupling agent, which may be carbodiimide. (Claims 8 and 10 and column 8, lines 30-33). Kamel (column 8, lines 33-41) further makes it clear that it is the PAA in the coating which contributes the pendant terminal carboxylic acid groups which are available for crosslinking with the second biocompatible material. Kamel discloses only one way to attach acrylic acid to a lens substrate; via plasma induced grafting. There is absolutely no disclosure in Kamel which would suggest that acrylic acid could be covalently bound to the substrate material using a coupling agent.

The claims of the present invention recite a process for coating a biomedical device comprising contacting a surface of the device with at least one hydrophilic polymer and a coupling agent. Claims 29, 30 and 34-36 recite specific carboxyl functional polymers, none of which are polysaccharides. Clearly the claims of the present invention (and especially claims 29, 30 and 34-36) are not obvious in view of Kamel.

Examiner states that "Applicants argue that Kamel does not teach that carbodiimide may be used to cross-link biocompatible materials to any groups of the substrate polymer. This argument is not persuasive as there is no corresponding limitation in the claims." Page 2, lines 14-19. Applicants respectfully disagree. Claim 27 clearly states, in relevant part:

> "A process for applying a coating effective amount of at least one carboxyl function hydrophilic polymer ***to a biomedical device, wherein at least one surface of said biomedical device*** comprises hydroxyl groups, amino groups or mixtures thereof"

Thus, claim 27 clearly states that it is the surface of the biomedical device, and not a coating thereon, which comprising the amino and/or hydroxyl groups and to which the hydrophilic polymer is coupled.

Responding to Examiner's question regarding carbodiimide, carbodiimide is not coupled with anything. Carbodiimide is a coupling agent, it forms a covalently bonded adduct with the hydrophilic polymer (for example PAA) and allows the hydroxyl or amino groups in the biomedical device surface to covalently bond to the carbodiimide/PAA aduct. Finally, Examiner asserts that the contacting step in the present claims could include plasma grafting. Even if Applicants' process included a plasma grafting as part of the contacting step, Kamel still would not suggest the present invention as Kamel does not disclose using a crosslinking agent in Kamel's first plasma grafting step. The crosslinking agents of Kamel are only used to crosslink a second biocompatible material (such as a polysaccharide) to the first biocompatible material. The only suggestion to use a coupling agent to covalently bond hydrophilic polymers to a biomedical device surface comes from the present invention.

Applicants respectfully submit that the foregoing arguments have traversed the Examiner's rejection. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

By: _____

Karen A. Harding
Reg. No. 33,967

Johnson & Johnson
P.O. Box 1222
New Brunswick, NJ 08933
(904) 443-3074
September 3, 2002